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• • • REMARKS/ARGUMENTS • • •

The Office Action of September 10, 2007 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment, a related applications section has been added to page 1 of the specification, which lists and claims priority to applicants' international PCT application and Chinese priority application.

Claim 1 has been changed to recite that the CoQ_{10}-containing preliposomes contain spongiamine in liposome structures of the CoQ_{10}-containing preliposomes.

This change is directed at correcting the indefiniteness basis upon which the Examiner rejected claim 1 under 35 U.S.C. §112, second paragraph on page 5 of the Office Action.

Also claim 6 has been amendment in the manner requested by the Examiner on page 4 of the Office Action.

Entry of the changes to the specification and claims is respectfully requested.

On page 2 of the Office Action the Examiner stated that applicants have not complied with 37 CFR §1.63(c) since applicants' declaration does not acknowledge the filing of any foreign application.

The Examiner's position seems to be wrong. Applicants' original declaration clearly identifies foreign application CN 03115914.1. Moreover, the PTO filing receipt acknowledges and lists this priority document. The Examiner is kindly requested to review applicants' original declaration.

As requested by the Examiner, applicants have amended the first page of the specification to recite the related applications and claim priority thereto.

Claims 1-8, 10 and 12-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,824,790 to Yatvin in view of U.S. Patent Application Publication No. 2002/0039595 to Keller and Wen-Jian Lan, et al. (Acta Scientarium Naturalium Universitatus Sunyatseni, Jan, 2004).

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Yatvin in view of Keller and Wen-Jian Lan, et al. and further in view of U.S. Patent No. 6,261,575 to Hoppe et al.

Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Yatvin in view of Keller and Wen-Jian Lan, et al. and further in view of Chen et al. (Journal of Pharmaceutical Sciences, 1987 and U.S. Patent No. 5,318,987 to Weithmann et al.

For the reasons set forth below it is submitted that all of the pending claims are allowable over the prior art of record and therefore, each of the outstanding prior art rejections of the claims should properly be withdrawn.

Favorable reconsideration by the Examiner is earnestly solicited.

The Examiner has relied upon Yatvin as teaching:

> ...pharmaceutical compositions and methods of making wherein the proliposomal compositions include and antioxidant (page 4 para 59), a ceramide and cholesterol (page 4 para 58). Wherein the composition is in dry granular form (page 4 para 55) lyophilized and then compressed into a solid tablet is taught (page 5 para 73). The presence of the cholesterol lowers the melting point of the lipid solution so that a lower temperature may be used to melt the antioxidant and lipid (ceramide) (page 6 para 80). The use of lactose in the method is taught as well as dissolving the

components with an organic solvent (page 4 para 62 and page 5 para 70-71).

The Examiner concedes that:

Yatvin does not specifically teach including Q10 as the antioxidants or spongiamine as the ceramide

The Examiner has relied upon Keller as teaching:

...a method of making a preliposome formulation and then dehydrating it. Biologically active materials for the preliposome formulation include nutritional supplements and antioxidants such as coenzyme Q10 (page 4 claim 5).

The Examiner has relied upon Wen-Jian Lan et al. as teaching:

...the discovery of two new ceramides named Spongiamine A and Spongiamine B that were isolated from the sponge *Spongia sp.* (abstract and page 3 of translation). Ceramides are taught to be the main structure for forming sphingolipids and offer advanced activity in anti-tumor, anti-virus, anti-hepatotoxi and immunization uses as well as highly effective for moisturizing (page 2 of translation). The data show that spongiamine are characterized by the classical structure of cermides (page 4 of translation).

In combining the teachings of Yatvin, Keller and Wen-Jian Lan et al. the Examiner takes the position that:

...one of ordinary skill in the art would have been motivated to include CoQ10 in the method and composition of Yatvin as the antioxidant because Keller teaches that CoQ10 is a suitable antioxidant to be used in a preliposomal formulation.

....one of ordinary skill in the art would have been motivated to include the discovery of two new ceramides named Spongiamine A and Spongiamine B that were isolated from the sponge *Spongia sp.*

Yatvin discloses a proliposomal composition comprising a polycyclic aromatic antioxidant,

a ceramide and cholesterol.

Keller discloses a liposome-capsule dosage unit comprising 1.29wt% of Coenzyme Q_{10} and ceramides and cholesterol.

The Examiner indicates that a skilled person in the art would have been motivated to include Coenzyme Q_{10} in the composition of Yatvin as the antioxidant because Keller teaches that Coenzyme Q_{10} is a suitable antioxidant to be used in a preliposomal formation.

In response to what the Examiner purports would have been obvious to one skilled in the art, applicants respectfully submit that the antioxidants disclosed in the proliposomal composition taught by Yatvin are polycyclic aromatic antioxidants such as stilbene and flavonoids.

In contract, it is well-known that Coenzyme Q_{10} (also known as ubiquinone) is a quinone antioxidant and not a polycyclic aromatic antioxidant.

Accordingly, a skilled person in the art would not have been motivate to combine the Coenzyme Q_{10} in the liposome composition of Keller and the ceramide of the preliposomal composition of Yatvin to obtain the CoQ_{10}-containing preliposomes of claim 1 of the present invention, because the teachings of Yatvin actually exclude Coenzyme Q_{10}.

Furthermore, it is noted that Keller actually discloses a liposome composition and not a proliposomal composition.

Although Keller mentions employing a preliposomal formulation as the liposome-drug complex and teaches that the formulation is composed of the biologically active material, phospholipids and cholesterol, it cannot be said that a preliposomal formulation is taught or supported by the description in Keller, because such a preliposomal formulation containing the

biologically active material, phospholipids and cholesterol has never been prepared in any Examples of Keller.

As disclosed in the Example 4 of applicants' specification, stability test show that the contents of Coenzyme Q_{10} contained in the general liposomes decrease over time, while the contents of Coenzyme Q_{10} contained in the preliposomes do not decrease significantly over time.

Thus, the CoQ_{10}-containing preliposomes of the present invention provide unexpected stability of the drug. In addition, the spongiamine contained in the CoQ_{10}-containing preliposomes can further facilitate the percutaneous absorption and improve the effect of CoQ_{10} in cosmetic formulations.

In light of the above, it is submitted that Yatvin and Keller actually teaches away from the present invention, and therefore and their teachings actually weigh in on the inventiveness of the present invention, rather than obviousness as the Examiner purports.

The present invention overcomes such technical problems and advances the technology beyond the teachings of the prior art

The Examiner's reliance upon the tertiary references to Hoppe et al., Chen et al. and Weithmann et al. does not address or overcome the differenced between Yatvin, Kelley and Wen-Jian Lan et al. as noted supra.

Based upon the above distinctions between the prior art relied upon by the Examiner and the present invention, and the overall teachings of prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon the prior art as required under 35 U.S.C. §103 to establish a *prima facie* case of obviousness of applicants' claimed invention.

It is, therefore, submitted that any reliance upon prior art would be improper inasmuch as the prior art does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of the prior art and the outstanding rejection of the claims should hence be withdrawn.

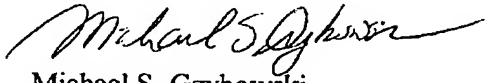
Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved; the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



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